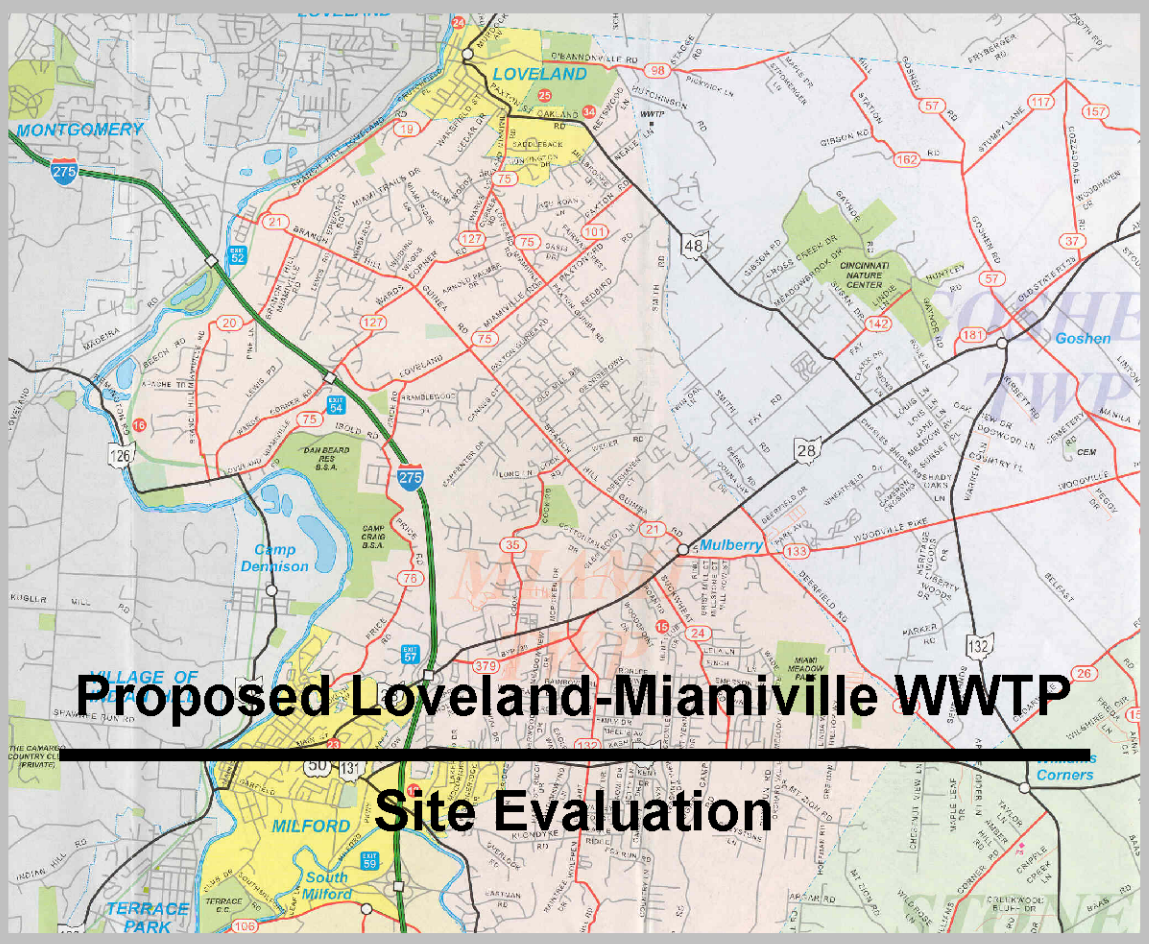
Memorandum

BBS CORPORATION



Proposed Loveland-Miamiville WWTP

Site Evaluation

Clermont County

Clermont County Sewer District

July 2004

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PROPOSED LOVELAND-MIAMIVILLE WWTP

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EXECUTIVE SUMMARY

The Clermont County Sewer District is considering a proposed wastewater treatment facility to serve the Loveland/Horner Run facility planning area. The Board of County Commissioners entered into an agreement on April 6, 2004 with BBS Corporation to site and complete the detailed design of the proposed facility.

There are four factors driving the need for a wastewater treatment facility in this planning area: public health and protection of water supply, consolidation and regionalization of collection and treatment facilities, water quality improvement and economic development. The proposed Loveland-Miamiville wastewater treatment plant will consolidate existing facilities (i.e. Indian Lookout and Bramblewood WWTPs) and eliminate localized semi-public and on-site systems that have previously been identified as the greatest potential contaminant threat to local wellfields and to public health and safety.

Candidate locations for the proposed wastewater treatment plant have been developed in prior planning studies and reports, including site locations within and around Miamiville. Other sites that have been suggested for consideration are located west of Miamiville along State Route 126 in the vicinity of Lake Remington and within the Horner Run drainage area, including two possible sites located east of Interstate 275 and several additional sites located between Interstate 275 and the Little Miami River.

A facilitated workshop was held May 13, 2004 to discuss the project with interested stakeholders, review the proposed sites under consideration, develop criteria for the evaluation of the proposed sites and discuss and solicit stakeholder input on the relative importance of each of the criteria. The procedure presented in the workshop to evaluate the sites consisted of grading the criteria for each site and using a factor to weight the relative importance of each criterion. Thirteen site evaluation criteria were developed and weighted based on the outcome of a stakeholder survey. Grading of the criteria for each site was undertaken by BBS Corporation. Grading and weight factor determination was conducted in a double-blind manner. Neither the stakeholders nor BBS Corporation staff had knowledge of the other's input prior to the tabulation of the data and computation of raw scores.

Based on the candidate sites under consideration and the outcome of the site evaluation process described herein, the highest ranked site was the Ward's Corner site, located on Loveland-Miamiville Road, east of State Route 126. The existing Ward's Corner Wastewater Treatment Plant, which serves the business complex on Ward's Corner Road adjacent to Interstate 275 and which is owned and operated by CCSD, is located on this site. Therefore, the construction of the proposed Loveland-Miamiville WWTP on this site would be compatible with existing land use. Accordingly, BBS Corporation recommends that the Clermont County Board of Commissioners consider this site to construct the proposed Loveland-Miamiville WWTP.

Upon Board approval of the recommended site, additional land will be required adjacent to the property to construct the needed wastewater treatment facilities. The additional land required will be determined after preliminary engineering and facility layout is completed and forwarded to CCSD. Detailed plans for the proposed plant are intended to be completed by the end of December 2004.

INTRODUCTION

Wastewater treatment facilities function to protect the environment in which they reside. The Federal Clean Water Act, which requires the construction and operation of wastewater treatment facilities, is regarded as one of the most far-reaching and beneficial pieces of federal legislation. Since 1972 when the Act was authorized, the nation's waterways have been revitalized, making primary contact activities such as fishing and swimming popular in areas that were previously considered a threat to public health. Prior to 1972, many of the nation's waters were impacted by untreated wastewater. Improvement to the nation's water quality is directly related to the construction and successful operation of wastewater collection and treatment systems.

The Clermont County Sewer District is considering a proposed wastewater treatment facility to serve the Loveland/Horner Run facility planning area. Wastewater generated within the facility planning area currently passes through a combination of localized wastewater treatment systems, small semi-public treatment facilities (e.g. serving trailer parks, schools and commercial establishment clusters) and individual on-site systems. The proposed facility will be required to meet stringent state requirements and nutrient control initiatives to protect the Little Miami River.

There are four factors driving the need for a wastewater treatment facility in this planning area: public health and protection of water supply, consolidation and regionalization of treatment facilities, water quality improvement and economic development. Approximately 40% of the planning area (about 57% of the population) is served by centralized wastewater collection and treatment systems.

Failing on-site systems and small semi-public treatment plants that are reaching the end of their useful life are chronic contributors of increased pollutant loading to local creeks and the Little Miami River. Prior planning studies (Harza, 1995 and Quest, 2003) have estimated that 41% of the organic ($cBOD_5$) load, 40% of the total suspended solids load, 25% of the total nitrogen load and 43% of the total phosphorus load from all point sources enters the environment from these facilities countywide. Estimated loads from semi-public and on-site systems within the Loveland/Horner Run facility planning area are presumed to be slightly lower but in the same general range as countywide estimates.

Other investigations (Bennett & Williams, 1991) within the planning area have identified individual onsite sewage disposal systems as the greatest potential contaminant threat to the aquifer supplying the Miami-Goshen-Stonelick wellfield. Additional investigations (Black & Veatch, 2002) also cite the elevated levels of bacteria present in area streams and conclude that the elimination of onsite systems should be considered to improve public health and safety.

The proposed Loveland-Miamiville wastewater treatment plant will consolidate existing facilities (i.e. Indian Lookout and Bramblewood WWTPs) and eliminate localized semi-public and on-site systems in the drainage area, help protect water supply and public health, enhance water quality of local streams and meet the needs for future growth within the area. The appearance of the facility will be designed to blend visually with local surroundings with sufficient buffer and screening provided to respect local residential areas and roadways.

The Clermont County Sewer District is committed to the use of advanced treatment processes that would consistently and reliably meet water quality objectives and minimize the production and off-site migration of odors. Hazards posed by the use and storage of chlorine-based compounds in the treatment process will be completely eliminated. Safer, more environmentally-sound processes such as ultraviolet light disinfection facilities are intended to be incorporated into the treatment plant design. Without the use of chlorine-based chemicals for disinfection, the potential formation of trihalogenated methanes (THMs) in the effluent will be eliminated, which will further serve to protect public health and the environment.

The purpose of this memorandum is to summarize the site evaluation process that was developed to assist the Clermont County Sewer District in locating the proposed wastewater treatment facility. The goal of the process is to recommend the highest ranked site, from those considered, based upon the assessment of criteria developed in conjunction with stakeholder involvement.

SITE EVALUATION PROCESS

A key element in the planning of a wastewater treatment project is the selection of an appropriate site for construction of the facility. As is often the case, an ideal site for the location of a wastewater treatment facility may not be available. Therefore, the challenge of selecting a site is finding a location that can be developed economically with minimal environmental impact and without adverse impact on existing residential areas and future development in the area.

Candidate Sites for Proposed Loveland-Miamiville WWTP

Candidate locations for the proposed wastewater treatment plant have been developed in prior planning studies and reports. These include site locations identified in the 2002 Black & Veatch Report and the Harza Study of 1995. Other sites that have been suggested for consideration are located west of Miamiville along State Route 126 in the vicinity of Lake Remington and within the Horner Run drainage area, including two possible sites located east of Interstate 275 and several additional sites located between Interstate 275 and the Little Miami River. The location of each site is shown in **Figure 1**. Photographs and/or digital orthographic images of the sites are appended to this memorandum.

Stakeholder Workshop

Various stakeholder groups and County staff were solicited for their input to the site evaluation and selection process during a facilitated workshop, held May 13, 2004. Stakeholder groups that participated in the workshop included the Miamiville Civic Association, Bramblewood Homeowners Association, Boy Scouts of America (Dan Beard Council) and Little Miami Incorporated. A listing of workshop attendees is appended to this memorandum. The workshop was not intended to be a forum for the debate of treatment plant sites or for the development of new locations. The

purpose of the workshop was to discuss the project, review the proposed sites under consideration, develop criteria for the evaluation of the proposed sites and discuss and solicit input on the relative importance (i.e. use of weighting factors) of the criteria.

Site evaluation criteria were developed prior to the workshop and revised based on input from the stakeholders during the workshop. A summary of the site evaluation criteria is shown below followed by a detailed explanation of how each criterion was graded.

Site Evaluation Criteria

- Accessibility
- Property Acquisition
- Buffer Zone
- Topography
- Public Support
- Residential Impact
- Expandability
- Aquifer Impact
- Permitability/Regulatory
- Riparian Zone Protection
- Construction Traffic Impact
- Capital/O&M Costs (WWTP)
- Capital/O&M Costs (Sewers & PS)

Accessibility – Site is graded "excellent" if it is accessible from a state route or major highway with a minimum of travel on secondary or residential streets. Site is graded "poor" if it requires significant travel on secondary roads and/or streets serving residential areas.

Property Acquisition – Site is graded "very easy" if it is anticipated that land can be acquired easily as would be the case of a willing seller. Site will be graded "very difficult" if it is anticipated that land acquisition will be tenuous as in the case of an uncooperative seller.

Buffer Zone – Buffer zones are areas such as rivers, hillsides, woods or commercial/ industrial areas that would normally preclude the subsequent encroachment of residential development. Site is graded "excellent" if it has an existing buffer zone surrounding it and/or future residential encroachment is not anticipated and is graded "poor" if it has little or no buffer zone and/or future residential development is anticipated.

Topography – Site is graded "excellent" if flood protection structures or embankments are not required and hydraulic design facilitates gravity flow with minimal pumping required. Site is graded "poor" if flood protection structures are required or topographic relief requires pumping.

Public Support – Site is graded "very high" if perception of public support exists and graded "very low" if significant public opposition exists.

Residential Impact – Site is graded "negligible" if located near a minimal number of permanently occupied or seasonally occupied residential dwellings or facilities and is graded "very high" if near a significant number of said dwellings.

Expandability – Site is graded "very high" if it offers significant flexibility and potential to expand to meet future capacity or regulatory needs and graded "very low" if it does not offer any significant flexibility or expandability potential.

Aquifer Impact – Site is graded "negligible" if it has no or minimal impact on existing or planned drinking water aquifers and is graded "very high" if site encroaches on existing or planned drinking water aquifers.

Permitability/Regulatory – Site is graded "excellent" if a permitted wastewater treatment outfall exists adjacent or near to the proposed site that could be modified for use and/or a permit-to-install could be obtained without regulatory impediment and is graded "poor" if a permitted wastewater treatment outfall does not exist near or adjacent to the site and/or if strong regulatory disapproval exists.

Riparian Zone Protection – Riparian zones typically consist of vegetated corridors that protect stream channels from erosion and which help to regulate stream water temperature. Site is graded "excellent" if riparian zone encroachment is not required as a result of construction activities and is graded "poor" if riparian zone encroachment may be required.

Construction Traffic Impact – The degree of public inconvenience is based on the amount of anticipated construction within narrow road rights-of-way and the potential impact of plant construction traffic in residential areas. Site is graded "negligible" if it has minimal construction within narrow rights-of-way (ROW) and the plant will generate little construction traffic in residential areas. Site is graded "very high" if it will have significant construction within narrow ROWs and/or will generate significant construction in residential areas.

Capital and O&M Costs – Capital cost is the initial cost of plant, trunk sewer and pump station construction, including engineering and administration costs. Operation and maintenance (O&M) costs include the cost to operate and maintain all required facilities. Grading will be "high" if costs are comparatively low and "low" if costs are comparatively high.

The procedure presented in the workshop to evaluate the sites consisted of grading the criteria (A, B, C, D or F) for each site (determined by BBS Corporation) and using a factor (determined by the stakeholders) to weight the relative importance of each criterion. To enable a score to be computed, each grade was assigned a numerical equivalence as follows: A=5, B=4, C=3, D=2 and F=1. The raw scores for each of the 13 criteria were then added to arrive at an aggregate score for each proposed site then ranked based on the outcome of aggregate scoring. Site ranking was on the basis of comparative aggregate score. The site with the highest aggregate score (i.e. the most desirable site) received a rank of "1", the next highest score received a

rank of "2" and so on with the lowest aggregate score (i.e. least desirable site) assigned a rank of "6". Grading and weight factor determination was conducted in a double-blind manner. Neither the stakeholders nor BBS Corporation staff had knowledge of the other's input prior to the tabulation of the data and computation of raw scores.

Grading of individual site criteria was performed independently by four BBS Corporation staff members acquainted with the project. A total of 78 grades were assigned to the criteria (13 criteria per site x 6 candidate sites x 1 grade per criterion) after discussion and agreement by the staff. **Table 1** outlines and summarizes the grading key used in the evaluation of site criteria.

Table 1
Site Evaluation Criteria
Grading Key

SITE EVALUATION CRITERIA				
	Accessibility			
	Buffer Zone			
	Topography	Residential Impact		
	Permitting/Regulatory	Aquifer Impact	Public Support	
	Riparian Zone Impact	Const Traffic Impact	Expandability	Property Acquisition
Grade	**DESCRIPTION**			
A	Excellent	Negligible	Very High	Very Easy
B	Good	Low	High	Easy
C	Average	Medium	Medium	Average
D	Below Average	High	Low	Difficult
F	Poor	Very High	Very Low	Very Difficult

Notes: Grades were assigned numerical values as follows to enable a score to be computed for each criterion: A = 5, B = 4, C = 3, D = 2, F = 1.

The grading of capital and operation and maintenance (O&M) criteria followed from the derivation of estimated life cycle costs to construct and maintain the needed facilities at each location, taking into consideration such factors as sewer alignment, pumping station needs and site preparation requirements. Grades were assigned based on individual present worth costs in relation to the calculated mean of the present worth costs as follows:

Grade	Capital/O&M Present Worth Costs
A	Mean Less 40% and Lower
B	Mean Less 20% to 40%
C	Within 20% of Mean
D	Mean Plus 20% to 40%
F	Mean Plus 40% and Greater

The present worth costs, appended to this report, varied based on existing site conditions, sewer and treatment plant construction costs and the location of treatment plant sites in relation to tributaries and the 100-year flood elevation. These costs are to be regarded strictly as preliminary and only for purposes of relative comparison.

The weighting factors were determined by surveying each of the eight stakeholders for input and tabulating the responses. A survey was mailed to each stakeholder on May 21, 2004 with individual responses due back to BBS Corporation by June 4, 2004. The response received from each stakeholder along with summary statistics of the responses is appended to this memorandum. The assignment of a weighting factor to each criterion was determined by averaging the results from each stakeholder. Criteria grading preceded the tabulation and assignment of weighting factors to eliminate the intrusion of bias to the scoring methodology.

SITE EVALUATION RESULTS

Table 2 summarizes the distribution of weight factors determined by averaging all valid stakeholder responses (there were no invalid responses), the grades assigned to the criteria, the raw and aggregate scoring and the ranking of individual sites based on aggregate scoring outcome. Individual stakeholder responses and a statistical summary of the responses are appended to this memorandum.

As is evident from the summary table, the criteria given the greatest weight from the survey outcome were public support and residential impact followed by aquifer impact, buffer zone and land acquisition. Accessibility to the site and expandability were the least weighted criteria. Capital and operation/maintenance cost criteria had weight factors that are approximately one-third of those for public support and residential impact.

SENSITIVITY ANALYSIS

Sensitivity analysis observes the impact on a process outcome by changing the value of one or more key inputs to the process. For example, when computing project worth, sensitivity analysis shows how sensitive the economic payoff is to input parameters such as the discount rate, initial capital cost or maintenance costs expected to be incurred over a project's lifecycle. Sensitivity analysis reveals how profitable or unprofitable the project might be if input values to the analysis turn out to be different from what is assumed in a single-answer approach to measuring project worth. In a similar way, a sensitivity analysis of the computation and assignment of weighting factors to the site evaluation criteria produced a redistribution of aggregate scores and site ranking; however, the Ward's Corner Site retained the highest aggregate score (and rank) in each case.

Table 2
Site Evaluation Criteria
Grade, Weight Factor and Scoring Summary

Criteria	Weight Factor	Candidate Sites: Remington Rd		Miamiville		Wards Corner		Boy Scouts		Little Miami Inc.		Becker/Haas	
		GR	SC	GR	SC	GR	SC	GR	SC	GR	SC	GR	SC
Accessibility	2.125	A	10.625	B	8.500	B	8.500	D	4.250	D	4.250	F	2.125
Land Acquisition	9.375	B	37.500	C	28.125	A	46.875	D	18.750	F	9.375	C	28.125
Buffer Zone	9.625	B	38.500	C	28.875	B	38.500	A	48.125	A	48.125	B	38.500
Topography	4.000	B	16.000	B	16.000	B	16.000	D	8.000	C	12.000	C	12.000
Public Support	15.875	D	31.750	F	15.875	D	31.750	D	31.750	D	31.750	C	47.625
Residential Impact	15.875	D	31.750	D	31.750	C	47.625	B	63.500	B	63.500	B	63.500
Expandability	2.125	A	10.625	B	8.500	B	8.500	D	4.250	D	4.250	D	4.250
Aquifer Impact	12.750	C	38.250	C	38.250	C	38.250	C	38.250	C	38.250	C	38.250
Permitting/Regulatory	8.750	F	8.750	B	35.000	A	43.750	D	17.500	D	17.500	D	17.500
Riparian Zone Impact	7.500	B	30.000	C	22.500	B	30.000	C	22.500	C	22.500	C	22.500
Construction Traffic Impact	2.750	D	5.500	C	8.250	C	8.250	D	5.500	D	5.500	F	2.750
PW Costs (WWTP)	4.625	C	13.875	C	13.875	C	13.875	C	13.875	C	13.875	C	13.875
PW Costs (Sewers & PS)	4.625	F	4.625	B	18.500	B	18.500	C	13.875	C	13.875	B	18.500
Aggregate Score			277.750		274.000		350.375		290.125		284.750		309.500
Rank			5		6		1		3		4		2

Notes: "GR" refers to grade as determined by BBS Corporation
"SC" refers to raw score computed by the product of "GR" and WEIGHT FACTOR
Grade Equivalence: A=5, B=4, C=3, D=2, F=1

CONCLUSIONS AND RECOMMENDATIONS

Based on the candidate sites under consideration and the outcome of the site evaluation process previously described, the highest ranked site on which to construct the proposed Loveland-Miamiville Wastewater Treatment Facility is the Ward's Corner site, located on Loveland-Miamiville Road, east of State Route 126. The existing Ward's Corner WWTP, which serves the business complex on Ward's Corner Road adjacent to Interstate 275 and which is owned and operated by CCSD, is located on this site. Therefore, the construction of the proposed Loveland-Miamiville WWTP on this site would be compatible with existing land use. Accordingly, BBS Corporation recommends that the Clermont County Board of Commissioners consider this site to construct the proposed Loveland-Miamiville WWTP to consolidate existing wastewater treatment facilities within the planning area, to protect public health and existing water supply, to improve existing water quality of local streams and to provide for growth and economic development within the area.

FUTURE DIRECTIONS

Upon Board approval of the recommended site, additional land will be required adjacent to the property to construct the needed wastewater treatment facilities. The additional land required will be determined after preliminary engineering and facility layout is completed and forwarded to CCSD. Detailed plans for the proposed plant are intended to be completed by the end of December 2004. This completion date coincides with the expiration date of the NPDES Permit (1PZ00010*CD) governing the effluent discharge from the existing Ward's Corner WWTP.

In May 2003, the CCSD submitted an NPDES Permit application for the proposed 2 million gallon per day Loveland-Miamiville WWTP. In a letter dated February 10, 2004 from the Ohio EPA, the application was judged incomplete because of an undisclosed discharge location and for other pertinent information required by the Director of OEPA. The effluent from the proposed Loveland-Miamiville WWTP is planned to discharge to the same unnamed tributary that receives effluent from the existing Ward's Corner WWTP, pending regulatory review. Therefore, re-application of the NPDES Permit, heretofore judged as incomplete, should be resumed by CCSD along with applicable anti-degradation and other submittals as required.

Appendix A
Site Photographs

Remington Road Site

The Remington Road Site is located along SR 126 between the existing trailer park and Lake Remington (looking east from Lake Remington Road)

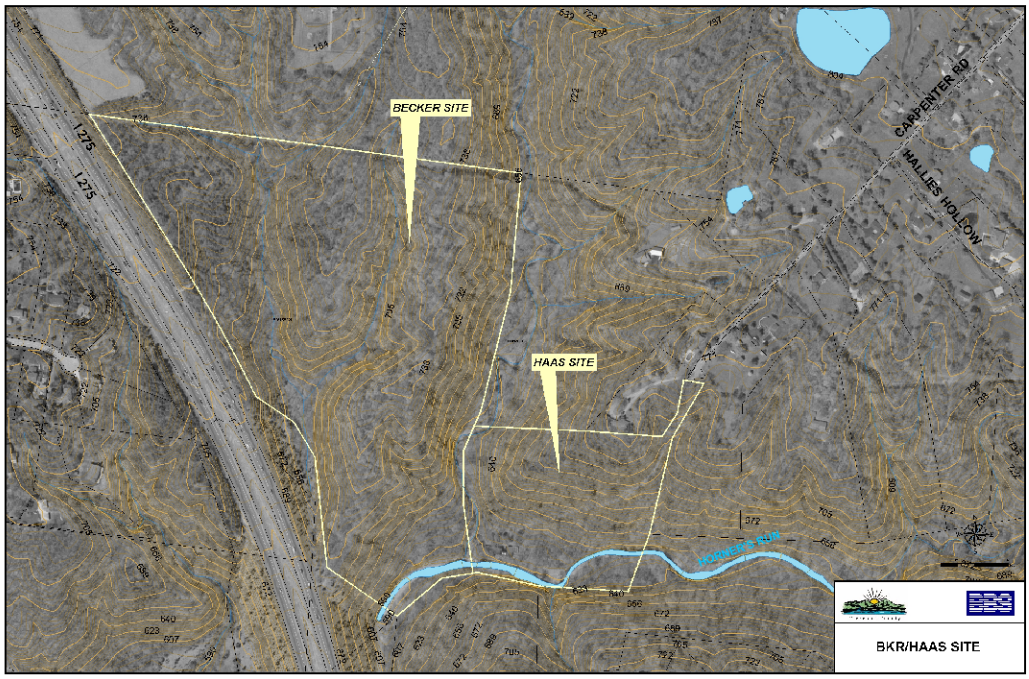
Miamiville Site

The Miamiville Site is located east of Wards Corner Road and north of Loveland Miamiville Road in the vicinity of Miamiville beyond the tree line shown in the photo (looking east from Wards Corner Road)

Wards Corner Site

The Wards Corner Site is adjacent to the existing Wards Corner WWTP located along Loveland-Miamiville Road (looking north from Loveland-Miamiville Road)

Becker/Haas Site

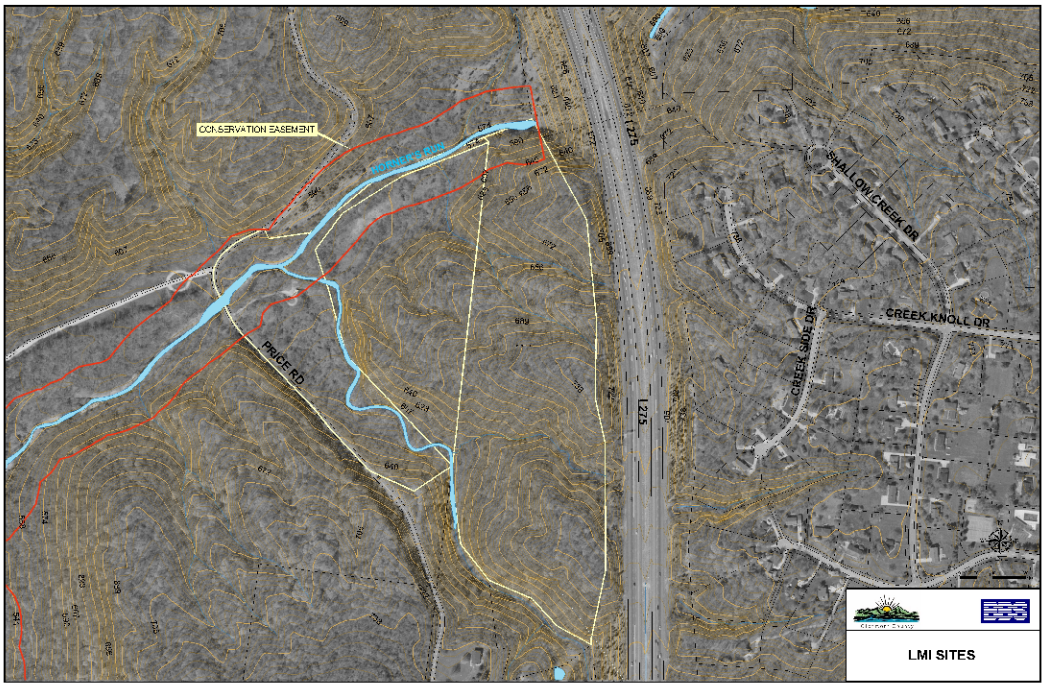


The Becker/Haas Site is located east of IR-275 within the Horner Run Drainage Basin (digital orthographic image of Becker and Haas properties are outlined adjacent to Horner Run and alongside IR-275)

Boy Scouts of America Site

Site BSA is located off Price Road in the vicinity of Camp Craig within the Horner Run Drainage Area (looking west from Price Road)

Little Miami Incorporated Site



The Little Miami Inc. Site is located off Price Road within the Horner Run Drainage Area (digital orthographic image of LMI properties is outlined, red line is existing 300' wide conservation easement that extends along Horner Run)

Appendix B
Workshop Attendees & Stakeholder List

LOVELAND-MIAMIVILLE WWTP
SITING WORKSHOP
MAY 13, 2004
9:00 A.M.

SIGN-IN SHEET

NAME	TITLE/COMPANY	TELEPHONE	E-MAIL ADDRESS
Marie Browne	Miamiville Civic	831-2690	marie.browne@morganstanley.com
Kelly Rolle	Miamiville Civic	831-5498	KROLB@AOL.COM
Wm. K. Hopkins	Little Miami, Inc	965-9344	hopkins@littlemiami.com
JERRY LEE BALLARD	ODNR-Scenic Rivers	513-934-0751	jballard@go-concepts.com
Don Cuthbert	BBS Corporat...	513-489-0779	dcuthbert@bbsengineers.com
ALAN SMITH	BBS CORP	513-489-0779	asmith@bbs-engineers.com
Robert Wilder	Health Dist.	513-732-7499	rwilder@co.ch.us
JOE PRAVETZ	BRAMBLEWOOD ASSOC	513-677-8007	JPRAVETZ@AOL.COM
Tom YEAGER	CLERMONT CO.	(513) 732-7930	tyeager@co.clermont.oh.us
DAVID DUCKWORTH	MIAMI TOWNSHIP	513-248 3725	davedduckworth@miamitwp.org
Mike Hale	Boy Scouts	513-961-2336	mihale@bsamail.org
David Spinney	B&A Co. Comm	513-732-7352	dspinney@co.clermont.oh.us
Ron Ware	Ohio EPA-DSW	(937) 285-6098	ronware@epa.state.oh.us
Barbara Hoyt	Falcon Dynamics	513-561-0290	bhoyt@cinci.rr.com

Appendix C
Weighting Factor Survey Responses

CLERMONT COUNTY SEWER DISTRICT
LOVELAND-HORNER'S RUN FACILITY PLANNING AREA
WWTP SITE CRITERIA WEIGHTING FACTORS

SITE EVALUATION CRITERIA	WEIGHT FACTOR SURVEY								Stat Summary	
	BHA	MCA	BSA	LMI	MTP	ClerCo Admin	ClerCo CCSD	ClerCo Health	Total	Average
ACCESSIBILITY	0	0	0	2	5	0	5	5	17	2.125
ACQUISITION OF PROPERTY	0	0	30	30	0	5	5	5	75	9.375
BUFFER ZONE	30	20	0	2	10	10	0	5	77	9.625
TOPOGRAPHY	0	0	0	2	0	10	10	10	32	4.000
PUBLIC SUPPORT	30	20	30	2	20	5	5	15	127	15.875
RESIDENTIAL IMPACT	30	30	0	2	30	10	10	15	127	15.875
EXPANDABILITY	0	0	0	2	5	5	0	5	17	2.125
AQUIFER IMPACT	0	20	20	2	30	10	10	10	102	12.750
PERMITABILITY/REGULATORY	0	0	0	20	0	20	30	0	70	8.750
RIPARIAN ZONE PROTECTION	0	0	20	30	0	5	5	0	60	7.500
CONSTRUCTION TRAFFIC IMPACT	10	10	0	2	0	0	0	0	22	2.750
CAPITAL/O&M COSTS (WWTP)	0	0	0	2	0	10	10	15	37	4.625
CAPITAL/O&M COSTS (SEWERS+P/S)	0	0	0	2	0	10	10	15	37	4.625
Totals	100	100	100	100	100	100	100	100		100.000

Survey Respondents:

BHA	Bramblewood Home Owners Association	Joe Pravetz
MCA	Miamiville Civic Association	Kelley Kolb
BSA	Boys Scouts of America (Dan Beard Council)	Michael Hale
LMI	Little Miami, Incorporated	Eric Partee
MTP	Miami Township	David Duckworth
ClerCo	Administrator	David Spinney
ClerCo	Sewer District	Tom Yeager
ClerCo	Health Department	Robert Wildey

CLERMONT COUNTY SEWER DISTRICT
LOVELAND-HORNER'S RUN FACILITY PLANNING AREA
WWTP SITE CRITERIA WEIGHTING FACTORS

PRELIMINARY EVALUATION CRITERIA	WEIGHT FACTOR
ACCESSIBILITY	
ACQUISITION OF PROPERTY	
BUFFER ZONE	30
TOPOGRAPHY	
PUBLIC SUPPORT	30
RESIDENTIAL IMPACT	30
EXPANDABILITY	
AQUIFER IMPACT	
PERMITABILITY/REGULATORY	
RIPARIAN ZONE PROTECTION	
CONSTRUCTION TRAFFIC IMPACT	10
CAPITAL/O&M COSTS (WWTP)	
CAPITAL/O&M COSTS (SEWERS+P/S)	
SUM	100%

Stakeholder Name: Bramblewood Homeowners assoc.

Representative: Joe Pravetz

Date: 27-May-04

A raw score will be computed for each evaluation criterion as follows: SCORE = WEIGHT FACTOR (decimal) x GRADE (numerical equivalent)

The weight factor assigned to each criterion will be determined as the average of the results from all valid stakeholder responses

To be valid, the sum of the weight factors shall be equal to 100% and no weight factor shall be assigned a value greater than 30%

Non-conforming or non-responsive evaluations shall be disregarded in the computation of averaging

CLERMONT COUNTY SEWER DISTRICT
LOVELAND-HORNER'S RUN FACILITY PLANNING AREA
WWTP SITE CRITERIA WEIGHTING FACTORS

PRELIMINARY EVALUATION CRITERIA	WEIGHT FACTOR
ACCESSIBILITY	0
ACQUISITION OF PROPERTY	0
BUFFER ZONE	20
TOPOGRAPHY	0
PUBLIC SUPPORT	20
RESIDENTIAL IMPACT	30
EXPANDABILITY	0
AQUIFER IMPACT	20
PERMITABILITY/REGULATORY	0
RIPARIAN ZONE PROTECTION	0
CONSTRUCTION TRAFFIC IMPACT	10
CAPITAL/O&M COSTS (WWTP)	0
CAPITAL/O&M COSTS (SEWERS+P/S)	0
SUM	100%

Stakeholder Name: Miamiville Civic Association

Representative: Kelly Kolb

Date: 29-May-04

A raw score will be computed for each evaluation criterion as follows: SCORE = WEIGHT FACTOR (decimal) x GRADE (numerical equivalent)

The weight factor assigned to each criterion will be determined as the average of the results from all valid stakeholder responses

To be valid, the sum of the weight factors shall be equal to 100% and no weight factor shall be assigned a value greater than 30%

Non-conforming or non-responsive evaluations shall be disregarded in the computation of averaging

CLERMONT COUNTY SEWER DISTRICT
LOVELAND-HORNER'S RUN FACILITY PLANNING AREA
WWTP SITE CRITERIA WEIGHTING FACTORS

PRELIMINARY EVALUATION CRITERIA	WEIGHT FACTOR
ACCESSIBILITY	
ACQUISITION OF PROPERTY	30
BUFFER ZONE	
TOPOGRAPHY	
PUBLIC SUPPORT	30
RESIDENTIAL IMPACT	
EXPANDABILITY	
AQUIFER IMPACT	20
PERMITABILITY/REGULATORY	
RIPARIAN ZONE PROTECTION	20
CONSTRUCTION TRAFFIC IMPACT	
CAPITAL/O&M COSTS (WWTP)	
CAPITAL/O&M COSTS (SEWERS+P/S)	
SUM	100%

Stakeholder Name: Dan Beard Council, Boy Scouts

Representative: Mike Hale

Date: 6/4/04

A raw score will be computed for each evaluation criterion as follows: SCORE = WEIGHT FACTOR (decimal) x GRADE (numerical equivalent)

The weight factor assigned to each criterion will be determined as the average of the results from all valid stakeholder responses

To be valid, the sum of the weight factors shall be equal to 100% and no weight factor shall be assigned a value greater than 30%

Non-conforming or non-responsive evaluations shall be disregarded in the computation of averaging

Alan Smith

From: partee@littlemiami.com
Sent: Thursday, June 03, 2004 12:20 PM
To: 'Alan Smith'
Cc: partee@littlemiami.com
Subject: CriteriaWgtFactorTable: Litle Miami Inc June 3, 2004

Alan, Please confirm reciept of this table. Eric

CLERMONT COUNTY SEWER DISTRICT
LOVELAND-HORNER'S RUN FACILITY PLANNING AREA
WWTP SITE CRITERIA WEIGHTING FACTORS

PRELIMINARY EVALUATION CRITERIA	WEIGHT FACTOR
ACCESSIBILITY	2
ACQUISITION OF PROPERTY	30
BUFFER ZONE	2
TOPOGRAPHY	2
PUBLIC SUPPORT	2
RESIDENTIAL IMPACT	2
EXPANDABILITY	2
AQUIFER IMPACT	2
PERMITABILITY/REGULATORY	20
RIPARIAN ZONE PROTECTION	30
CONSTRUCTION TRAFFIC IMPACT	2
CAPITAL/O&M COSTS (WWTP)	2
CAPITAL/O&M COSTS (SEWERS+P/S)	2
SUM	100%

Stakeholder Name: Little Miami Inc.

Representative: Eric B. Partee

Date: 3-Jun-04

A raw score will be computed for each evaluation criterion as follows: SCORE = WEIGHT FACTOR (decimal) x GRADE (numerical equivalent)

CLERMONT COUNTY SEWER DISTRICT
LOVELAND-HORNER'S RUN FACILITY PLANNING AREA
WWTP SITE CRITERIA WEIGHTING FACTORS

PRELIMINARY EVALUATION CRITERIA	WEIGHT FACTOR
ACCESSIBILITY	5%
ACQUISITION OF PROPERTY	0%
BUFFER ZONE	10%
TOPOGRAPHY	0%
PUBLIC SUPPORT	20%
RESIDENTIAL IMPACT	30%
EXPANDABILITY	5%
AQUIFER IMPACT	30%
PERMITABILITY/REGULATORY	0%
RIPARIAN ZONE PROTECTION	0%
CONSTRUCTION TRAFFIC IMPACT	0%
CAPITAL/O&M COSTS (WWTP)	0%
CAPITAL/O&M COSTS (SEWERS+P/S)	0%
SUM	100%

Stakeholder Name: Miami Township

Representative: David D. Duckworth

Date: 2-Jun-04

A raw score will be computed for each evaluation criterion as follows: SCORE = WEIGHT FACTOR (decimal) x GRADE (numerical equivalent)

The weight factor assigned to each criterion will be determined as the average of the results from all valid stakeholder responses

To be valid, the sum of the weight factors shall be equal to 100% and no weight factor shall be assigned a value greater than 30%

Non-conforming or non-responsive evaluations shall be disregarded in the computation of averaging

CLERMONT COUNTY SEWER DISTRICT
LOVELAND-HORNER'S RUN FACILITY PLANNING AREA
WWTP SITE CRITERIA WEIGHTING FACTORS

PRELIMINARY EVALUATION CRITERIA	WEIGHT FACTOR
ACCESSIBILITY	0
ACQUISITION OF PROPERTY	5
BUFFER ZONE	10
TOPOGRAPHY	10
PUBLIC SUPPORT	5
RESIDENTIAL IMPACT	10
EXPANDABILITY	5
AQUIFER IMPACT	10
PERMITABILITY/REGULATORY	20
RIPARIAN ZONE PROTECTION	5
CONSTRUCTION TRAFFIC IMPACT	0
CAPITAL/O&M COSTS (WWTP)	10
CAPITAL/O&M COSTS (SEWERS+P/S)	10
SUM	100%

Stakeholder Name: David Spinney

Representative: Board of County Commissioners

Date: 6/4/2004

A raw score will be computed for each evaluation criterion as follows: SCORE = WEIGHT FACTOR (decimal) x GRADE (numerical equivalent)

The weight factor assigned to each criterion will be determined as the average of the results from all valid stakeholder responses

To be valid, the sum of the weight factors shall be equal to 100% and no weight factor shall be assigned a value greater than 30%

Non-conforming or non-responsive evaluations shall be disregarded in the computation of averaging

CLERMONT COUNTY SEWER DISTRICT
LOVELAND-HORNER'S RUN FACILITY PLANNING AREA
WWTP SITE CRITERIA WEIGHTING FACTORS

PRELIMINARY EVALUATION CRITERIA	WEIGHT FACTOR
ACCESSIBILITY	5
ACQUISITION OF PROPERTY	5
BUFFER ZONE	
TOPOGRAPHY	10
PUBLIC SUPPORT	5
RESIDENTIAL IMPACT	10
EXPANDABILITY	
AQUIFER IMPACT	10
PERMITABILITY/REGULATORY	30
RIPARIAN ZONE PROTECTION	5
CONSTRUCTION TRAFFIC IMPACT	
CAPITAL/O&M COSTS (WWTP)	10
CAPITAL/O&M COSTS (SEWERS+P/S)	10
SUM	100%

Stakeholder Name: CLERMONT CO. SEWER DISTR.

Representative: TOM YEAGER

Date: JUNE 2, 2004

A raw score will be computed for each evaluation criterion as follows: SCORE = WEIGHT FACTOR (decimal) x GRADE (numerical equivalent)

The weight factor assigned to each criterion will be determined as the average of the results from all valid stakeholder responses

To be valid, the sum of the weight factors shall be equal to 100% and no weight factor shall be assigned a value greater than 30%

Non-conforming or non-responsive evaluations shall be disregarded in the computation of averaging

To [illegible] Fax # 484-0801

CLERMONT COUNTY SEWER DISTRICT
LOVELAND-HORNER'S RUN FACILITY PLANNING AREA
WWTP SITE CRITERIA WEIGHTING FACTORS

PRELIMINARY EVALUATION CRITERIA	WEIGHT FACTOR
ACCESSIBILITY	5
ACQUISITION OF PROPERTY	5
BUFFER ZONE	5
TOPOGRAPHY	10
PUBLIC SUPPORT	15
RESIDENTIAL IMPACT	15
EXPANDABILITY	5
AQUIFER IMPACT	10
PERMITABILITY/REGULATORY	
RIPARIAN ZONE PROTECTION	
CONSTRUCTION TRAFFIC IMPACT	
CAPITAL/O&M COSTS (WWTP)	15
CAPITAL/O&M COSTS (SEWERS+P/S)	15
SUM	100%

Stakeholder Name: Robert Wildey

Representative: Clermont General Health District

Date: 6/3/2004

A raw score will be computed for each evaluation criterion as follows: SCORE = WEIGHT FACTOR (decimal) x GRADE (numerical equivalent)

The weight factor assigned to each criterion will be determined as the average of the results from all valid stakeholder responses

To be valid, the sum of the weight factors shall be equal to 100% and no weight factor shall be assigned a value greater than 30%

Non-conforming or non-responsive evaluations shall be disregarded in the computation of averaging

Alan,
I tried to e mail this to you on 6-3-04 but couldn't get it to go. Here's a hard copy.
Robert Wildey

Appendix D
Estimated Costs Of Construction

CAPITAL/O+M COSTS (WWTP)

Site	REM	MVL	WRD	BSA	LMI	BKR/HAAS
Construction Cost Estimate ($)						
Subtotal	6,051,719	5,129,582	4,907,554	6,517,042	5,723,447	5,807,401
Subtotal with existing site grade impact	6,266,526	5,141,564	5,346,478	6,842,894	5,821,049	6,287,106
Contingency @ 20%	1,210,344	1,025,916	981,511	1,303,408	1,144,689	1,161,480
Bonds & Insurance @ 2%	121,034	102,592	98,151	130,341	114,469	116,148
Total Construction Cost Estimate ($)	7,597,904	6,270,072	6,426,140	8,276,643	7,080,207	7,564,734
Annual O&M Cost Estimate ($)						
Total Annual O&M Cost Estimate ($)	213,017	188,985	188,985	243,940	204,419	204,958
Present Worth Analysis						
Construction Present Worth	7,597,904	6,270,072	6,426,140	8,276,643	7,080,207	7,564,734
O&M Present Worth	2,443,287	2,167,643	2,167,643	2,797,969	2,344,671	2,350,852
Total Present Worth ($)	10,041,190	8,437,715	8,593,783	11,074,612	9,424,878	9,915,586
Site Grade for Capital/O&M Costs (WWTP)	C	C	C	C	C	C

CAPITAL/O+M COSTS (SEWERS+P/S)

Site	REM	MVL	WRD	BSA	LMI	BKR/HAAS
Construction Cost Estimate ($)						
Total Construction Cost Estimate ($)	19,619,700	6,453,250	4,784,300	6,252,200	6,252,200	5,411,600
Annual O&M Cost Estimate ($)						
Total Annual O&M Cost Estimate ($)	576,925	618,134	618,134	865,388	865,388	927,201
Present Worth Analysis						
Construction Present Worth	19,619,700	6,453,250	4,784,300	6,252,200	6,252,200	5,411,600
O&M Present Worth	576,925	618,134	618,134	865,388	865,388	927,201
Total Present Worth ($)	20,196,625	7,071,384	5,402,434	7,117,588	7,117,588	6,338,801
Site Grade for Capital/O&M Costs (Sewers+P/S)	F	B	B	C	C	B